V. On Agaricus crinitus, Linn., and some allied Species. By the Rev. M. J. Berkeley, M.A., F.L.S. &c. &c.

Read February 18th, 1845.

THE number of Fungi preserved in the Linnean herbarium is small, but they are in good condition, and comprise a few very interesting forms. Amongst them, not the least interesting is Agaricus crinitus, a species which, though correctly described, has been much misunderstood. The object therefore of the present memoir is to illustrate this and a few allied species, which there is the greater necessity for doing, as, by some mischance, the species described by Dr. Klotzsch in the 'Linnæa' were communicated to Fries under transposed names, in consequence of which, without reference to the original specimens, the confusion is almost inextricable, especially as the same species are marked by other names by Dr. Klotzsch in Sir W. J. Hooker's herbarium. It is hoped that the present observations may help to place them on a surer footing, especially as they are accompanied by accurate drawings, of which it is sufficient to say, that they are from the pencil of Mr. J. De Carle Sowerby.

1. Lentinus crinitus; pileo latè infundibuliformi repando badio-rufo fibris innatis apice liberis vix fasciculatis regulariter striato margine reflexo, stipite æquali pallido sericeo-farinoso, lamellis acutis integris rigidius-culis subdistantibus glandulosis decurrentibus posticè anastomosantibus. (Tab. IX. fig. 1.)

Agaricus crinitus, L. Sp. Plant. ed. 2. p. 1644.

Hab. On wood, South America. Rolander in the Linnean herbarium.

Pileus $1\frac{5}{4}$ of an inch across, broadly infundibuliform, with the border arched, of a dark redbrown, closely and regularly striate with silky fibres, the ends of which are free, flat and ascending, and very slightly if at all fasciculate; margin inflected. Stem about $\frac{5}{4}$ of an inch high, $1\frac{1}{2}$ line thick, firm, hard, nearly equal except towards the base,

where it is slightly incrassated, dark, and expands over the wood on which it grows, paler than the pileus and clothed with a little white silky meal, with a few very minute dark scales towards the base. Gills narrow, rather rigid, subochraceous, nearly entire, rather distant, slightly forked, glandular, decurrent and anastomosing behind.

The fungus described by Fries as Ag. crinitus, Swartz, is a very distinct species, of which I have given a figure and description in the 'Annals of Natural History,' from an authentic specimen in the British Museum. It was supposed at the time that Swartz's name was correct, but on consulting the Linnean herbarium it appeared to be very different. I possess specimens from Brazil, and there is one in the herbarium of Mr. Edward Forster. It is distinguished at once by its very pale colour, fasciculate hairs and other peculiarities. This was stated in the second volume of Sir W. J. Hooker's 'London Journal of Botany,' p. 632, and the name of Lentinus Swartzii proposed for it.

Of the synonyms cited by Linnæus, that in Brown's 'History of Jamaica,' tab. 15. fig. 1, is a fair representation of the species. The plant of Plumier, tab. 168. fig. B, is clearly something of a totally different character.

- 2. Lentinus tener; pileo tenui regulari latè infundibuliformi repando cervino fibris fasciculatis subcrispis vestito subtùs sericeo-striato margine subsulcato, stipite gracili æquali pallido granulato-furfuraceo, lamellis subdistantibus pallido-ligneis opacis lato-denticulatis glandulosis decurrentibus posticè vix anastomosantibus. (Tab. IX. fig. 2:)
- Lentinus tener, Klotzsch. Fries, Syn. Lent. p. 6; Epicrisis, p. 389. Berk. in Hook. Lond. Journ. of Bot. vol. ii. p. 632.
- Hab. On wood. Organ Mountains, Gardner; and according to Klotzsch, New Orleans. (Hook. Herb.)
- Pileus $2\frac{1}{4}$ inches across, regularly infundibuliform, with the border spreading, thin and flexible, not at all rigid, fawn-coloured, darker in the centre, clothed with scattered fascicles of fibres, which are paler towards the margin; these gradually fall off and expose the surface of the pileus, which is striate with innate fibres; margin sulcate, not involute. Stem nearly $1\frac{1}{2}$ inch high, more than a line thick, pale, smooth, with the exception of a few minute granular branny scales. Gills rather distant, decurrent, scarcely at all anastomosing at the base, broadly toothed, or rather incised, glandular, of a pallid wood colour, with a peculiar opake appearance.

The plant still remaining in Sir W. J. Hooker's herbarium, though somewhat injured by insects, is marked by Dr. Klotzsch Lentinus villosus, but it is neither the species described under that name in his MSS. nor that so sent to Fries. Whether or not there has been any mistake as to locality I cannot say, but there are no specimens marked as eoming from New Orleans in Sir W. J. Hooker's collection. It will be observed, that my description does not accord with that of Fries as regards the colour of the pileus and stem, but Mr. Gardner's plant is in a more perfect condition, and the under colour of the pileus and stem varies according to circumstances. Specimens which have been much exposed to the weather acquire a dark tinge; and their condition before being submitted to pressure, whether more or less saturated with moisture, makes some difference. The accompanying figure will indicate in a great measure the differences, which are stated at length under the following species.

3. Lentinus Schomburgkii; pileo tenui latè infundibuliformi repando cervino floecis mollibus fasciculatis leviter erispatis pallidis vestito demùm medio subglabrescente sericeo-striato, stipite æquali sublurido pareè furfuraceo apiec sericeo, lamellis confertis tenuibus decurrentibus posticè anastomosantibus pallidè cervinis eglandulosis acie denticulatis. (Tab. IX. fig. 3.) Hab. On dry wood. British Guiana, Schomburgk in Hook. Herb.

Pileus $1\frac{1}{2}$ inch across, thin, rigid and coriaceous when dry, broadly infundibuliform, with the border arched and the extreme edge slightly incurved, fawn-coloured, clothed with pale, fasciculate, slightly-curled flocci, at length comparatively smooth in the centre and sericeo-striate. Stem $\frac{3}{4}$ of an inch high, $1\frac{1}{2}$ line thick, fawn-coloured like the pileus, but with a dingy hue, slightly furfuraceous below, sericeo-striate above. Gills crowded, narrow, thin, of a pale fawn-colour, decurrent, slightly anastomosing behind; edge thin, denticulate; surface quite free from glands.

This species is nearly allied to *L. tener*, but it is smaller, more rigid, the hairs on the pileus are less coarse, the gills are thinner, more closely set, and they have no glands upon them. There is besides a peculiar dull appearance about those of *L. tener*, which at once distinguishes them.

4. Lentinus nigripes, Fries, Syn. Lent. p. 4; Epicrisis, p. 387. Klotzsch in Linn. vol. viii. p. 479. 1833. (Tab. IX. fig. 4.)

This species is well described in the 'Synopsis Lentinorum,' but no figure has hitherto been published. The pileus is far more densely clothed with fibres, the margin distinctly involute, the stem black, covered with a dull branny coat; the gills crowded and very distinctly glandular. This is *L. villosus*, Klotzsch, in Sir W. J. Hooker's herbarium, where he regards the two foregoing species as varieties. *L. villosus*, Fries, is quite a different species, and known generally under the name of *L. Berterii*. The species of Fries however, so named, is quite different. What the original plant of Sprengel is upon which that species is founded, I have no means at present of ascertaining.

- 5. Lentinus Leveillei; pileo tenui latè infundibuliformi repando explanato rigidiusculo floccis crispatis subfasciculatis rarioribus vestito, stipite æquali nigro furfuraceo, lamellis confertis furcatis decurrentibus glandulosis ochraceis acie granulato-dentatis posticè vix anastomosantibus. (Tab. IX. fig. 5.)
- Hab. Surinam. Communicated by M. Miquel (marked No. 17) to M. Léveillé, who kindly lent me the specimen.
- Pileus about $1\frac{1}{2}$ inch across, thin, rather rigid when dry, broadly infundibuliform, with the border arched, and the margin somewhat lobed, minutely denticulated, and not in the least inflected or involute, of a pale bay, fibrilloso-striate, and clothed with sparing fascicles of paler, slightly crisped, flat filaments. Stem about 1 inch high, 1 line thick, flexuous, nearly black, sparingly furfuraceous. Gills rather distant, forked, ochraceous; edge rough with minute granular processes, sprinkled with glandular processes.

This species approaches nearest to *L. nigripes*, but is smaller, the pileus less densely clothed, and the margin not in the least involute. M. Léveillé has lately given the characters of several new species, but none of them apparently closely allied to any of those just described. The species in the herbarium at the Jardin des Plantes which belong to this group are from Gaudichaud, collected from 1831 to 1833, and numbered from 38 to 41. M. Léveillé does not seem to have noticed them.

EXPLANATION OF THE PLATE.

TAB. IX.

- Fig. 1 a and 1 b. Lentinus crinitus, L. 1 c. A portion of the stem and under surface of the pileus, magnified. 1 d. Lateral view of a portion of the gills, magnified.
- Fig. 2 a. Lentinus tener, Klotzsch. 2 b. Portion of stem and gills, magnified. 2 c. Gills seen laterally, magnified.
- Fig. 3 a. Lentinus Schomburgkii, Berkel. 3 b. Portion of stem and gills, magnified. 3 c. Gills seen laterally, magnified.
- Fig. 4 a and 4 b. Lentinus nigripes, Fries. 4 c. Portion of stem and gills, magnified. 4 d. Gills seen laterally, magnified.
- Fig. 5 a. Lentinus Leveillei, Berkel., upper surface. 5 b. Lower surface. 5 c. Gills seen laterally, magnified. 5 d. A small portion of a gill, more highly magnified.